

IN THE CLAIMS:

Claims 1, 4, 9, 15, 20, 23, 28, 34, 39, 42, 47, 70, 71, 73, 74, 76, 77, and 79 have been amended. Claims 2, 3, 12, 21, 22, 31, 40, 41, 50, 58, 59, 63, 64, 68, 69 have been canceled. Claims 1, 4, 9, 15, 20, 23, 28, 34, 39, 42, 47, 60, 62, 65, 67, 70-71, and 73-79 are pending in the instant application. The following is the status of the claims of the above-captioned application, as amended.

1. (Currently Amended) A method of producing a heterologous protein, comprising:
 - (a) cultivating a mutant ~~of a parent~~ *Bacillus subtilis* cell transformed with a nucleic acid construct comprising a nucleic acid directing synthesis of the heterologous protein in a medium suitable for the production of the heterologous protein, wherein the mutant cell comprises a deletion mutation in a *cypX* gene comprising SEQ ID NO: 1, a *yvmC* gene comprising SEQ ID NO: 7, or both genes, in which the deletion mutation(s) renders the cell deficient in red pigment compared to a wild-type *Bacillus subtilis* cell comprising the *cypX* gene comprising SEQ ID NO: 1, the *yvmC* gene comprising SEQ ID NO: 7, or both genes ~~a first nucleic acid sequence encoding the heterologous protein and a second nucleic acid sequence comprising a mutation that inactivates at least one of the genes *cypX* and *yvmC*, wherein the mutation renders the mutant cell deficient in the production of a red pigment compared to the parent *Bacillus* cell when cultivated under the same conditions, wherein the *cypX* gene comprises the nucleic acid sequence of SEQ ID NO: 1 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 1, and the *yvmC* gene comprises the nucleic acid sequence of SEQ ID NO: 7 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 7; and~~
 - (b) recovering the heterologous protein from the cultivation medium.
2. (Canceled).
3. (Canceled).
4. (Currently Amended) The method of claim 1, wherein the heterologous protein ~~encoded by the first nucleic acid sequence~~ is involved in the biosynthesis of a biopolymer.
- 5-8. (Canceled).

9. (Currently Amended) The method of claim 1, wherein the heterologous protein ~~encoded~~
~~by the first nucleic acid sequence~~ is involved in the biosynthesis of a metabolite.

10-14. (Canceled).

15. (Currently Amended) The method of claim 1, wherein the mutant cell produces no detectable red pigment compared to the parent *Bacillus subtilis* cell when cultured under identical conditions.

16-19. (Canceled).

20. (Currently Amended) A isolated mutant of a parent *Bacillus subtilis* cell ~~for producing a heterologous protein~~, comprising a deletion mutation in a *cypX* gene comprising SEQ ID NO: 1, a *yvmC* gene comprising SEQ ID NO: 7, or both genes, in which the deletion mutation(s) renders the cell deficient in red pigment compared to a wild-type *Bacillus subtilis* cell comprising the *cypX* gene comprising SEQ ID NO: 1, the *yvmC* gene comprising SEQ ID NO: 7, or both genes, transformed with a first nucleic acid construct comprising a nucleic acid directing synthesis of sequence encoding the heterologous protein and a second nucleic acid sequence comprising a mutation that inactivates at least one of the genes *cypX* and *yvmC*, wherein the mutation renders the mutant cell deficient in the production of the red pigment compared to the parent *Bacillus* cell when cultivated under the same conditions and wherein the *cypX* gene comprises the nucleic acid sequence of SEQ ID NO: 1 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 1, and the *yvmC* gene comprises the nucleic acid sequence of SEQ ID NO: 7 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 7.

21-22. (Canceled).

23. (Currently Amended) The mutant cell of claim 20, wherein the heterologous protein ~~encoded by the first nucleic acid sequence~~ is involved in the biosynthesis of a biopolymer.

24-27. (Canceled).

28. (Currently Amended) The mutant cell of claim 20, wherein the heterologous protein ~~encoded by the first nucleic acid sequence~~ is involved in the biosynthesis of a metabolite.

29-33. (Canceled).

34. (Currently Amended) The mutant cell of claim 20, which produces no detectable red pigment compared to the parent *Bacillus subtilis* cell when cultured under identical conditions.

35-38. (Canceled).

39. (Currently Amended) A method of ~~isolating~~ producing a an isolated mutant ~~of a parent~~ *Bacillus subtilis* cell, comprising: making a deletion mutation in a *cypX* gene comprising SEQ ID NO:1, a *yvmC* gene comprising SEQ ID NO: 7, or both genes, of a *Bacillus subtilis* cell, in which the deletion mutation(s) renders the cell deficient in red pigment compared to a wild-type *Bacillus subtilis* cell comprising the *cypX* gene comprising SEQ ID NO:1, the *yvmC* gene comprising SEQ ID NO: 7, or both genes, and transforming the cell with a nucleic acid construct comprising a nucleic acid directing synthesis of a heterologous protein

~~(a) — introducing into the parent *Bacillus* cell a first nucleic acid sequence directing synthesis of a heterologous protein and a second nucleic acid sequence comprising a mutation of that inactivates at least one of the genes *cypX* and *yvmC*, wherein the mutation renders the mutant cell deficient in the production of a red pigment compared to the parent *Bacillus* cell when cultivated under the same conditions, and wherein the *cypX* gene comprises the nucleic acid sequence of SEQ ID NO: 1 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 1, and the *yvmC* gene comprises the nucleic acid sequence of SEQ ID NO: 7 or comprises a nucleic acid sequence having at least 95% homology to SEQ ID NO: 7; and~~

~~— (b) — isolating the mutant cell from step (a) comprising the mutation of at least one of the genes *cypX* and *yvmC*.~~

40-41. (Canceled).

42. (Currently Amended) The method of claim 39, wherein the heterologous protein ~~encoded by the first nucleic acid sequence~~ is involved in the biosynthesis of a biopolymer.

43-46. (Canceled).

47. (Currently Amended) The method of claim 39, wherein the heterologous protein ~~encoded by the first nucleic acid sequence~~ is involved in the biosynthesis of a metabolite.

48-59. (Canceled).

60. (Previously Presented) The method of claim 1, wherein the mutant cell is further deficient in the production of protease.

61. (Canceled).

62. (Previously Presented) The method of claim 1, wherein the mutant cell is further deficient in the production of surfactin.

63-64. (Canceled).

65. (Previously Presented) The mutant cell of claim 20, which is further deficient in the production of protease.

66. (Canceled).

67. (Previously Presented) The mutant cell of claim 20, which is further is deficient in the production of surfactin.

68-69. (Canceled).

70. (Currently Amended) The method of claim 39, wherein the mutant cell produces no detectable red pigment when compared to the parent *Bacillus subtilis* cell when cultured under identical conditions.

71. (Currently Amended) The method of claim 39, wherein the mutant *Bacillus subtilis* cell is further deficient in the production of protease.

72. (Canceled).

73. (Currently Amended) The method of claim 39, wherein the mutant *Bacillus subtilis* cell is further-deficient in the production of surfactin.

74. (Currently Amended) The method of claim 1, wherein the mutant *Bacillus subtilis* cell does not produce spores.

75. (Previously Presented) The mutant cell of claim 20, which does not produce spores.

76. (Currently Amended) The method of claim 39, wherein the mutant *Bacillus subtilis* cell does not produce spores.

77. (Currently Amended) The method of claim 1, wherein the mutant *Bacillus subtilis* cell is further deficient in the production of amylase.

78. (Previously Presented) The mutant cell of claim 20, which is further deficient in the production of amylase.

79. (Currently Amended) The method of claim 39, wherein the mutant *Bacillus subtilis* cell is further deficient in the production of amylase.